## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applican	ıt:	WILLS et al.	)	
Applicati	ion No.:		)	Group Art Unit: n/a
Filed:		February 27, 2004	)	Examiner: n/a
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		INFORMATION D	ISCLOSURE	<u>STATEMENT</u>
SIR:				
Т	the following	g are included with this	Information D	isclosure Statement:
[X]A. ]	PTO/SB/08			
[] <b>B.</b>	CERTIFIC (37 C.	ATION F.R. 1.97(c)-before fina	al Office Actio	n or allowance)
[] <b>C</b> .	•	E PAYMENT F.R. 1.97(c)-before fina	al Office Actio	n or allowance)
[] <b>D.</b>	PAYME	TITION, CERTIFICA ENT E.R.1.97(d)-before issue		CITION FEE
T 37 CFR		g are submitted in the al	bove-identified	l application in compliance with
[]I. ·		y of each listed U.S. Pa a)(2)(i)].	tent and U.S. I	Patent application publication
[X] II.	applic	ation. For each listed f ation [1.98(a)(2)]:	oreign patent a	published foreign patent and/or published foreign patent
[X]	a)			English translation if not be PTO-1449)[1.98(a)(3)];

- (b) U.S. counterpart patents or English language equivalents of the foreign patents or published foreign patent applications (see PTO-1449); and/or
- a concise explanation of the relevance of the listed patents, publications or other information (see PTO-1449, foreign search report or other, attached), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- A copy of each listed publication, other than published foreign applications. For each listed publication [1.98(a)(2)]:
  - [] (a) an English translation, if available, when the original publication is not in the English language (see PTO-1449)[1.98(a)(3)];
  - [] (b) a concise explanation of the listed publications (see PTO-1449), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- [] IV. For any other listed information, a copy of the information or that portion which caused it to be listed (see PTO-1449)[1.98(a)(2)(iii)].
- [] V. Each listed U.S. Patent, Publication or other information that was previously cited by or submitted to the Office in a prior application, which application is relied upon for an earlier filing date under 35 U.S.C.§ 120 [1.98(d)].
- [X] VI. Copies of each listed U.S. Patent and U.S. Patent application publication are not being submitted herewith pursuant to a waiver of 37 CFR 1.98(a)(2)(i) by the USPTO on July 11, 2003 for applications filed after June 30, 2003.

This information is submitted in the above-identified application in compliance with 37 C.F.R.1.97 because:

- [X] 1. This information disclosure is submitted within three months of the filing date of the application, or before the mailing date of the first office action on the merits of the application [1.97(b)].
- [] 2. This information disclosure is submitted before the mailing date of a final action in this application under 1.113[1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).
- [] 3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).

- This information disclosure is submitted after the mailing date of a final action []4. under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- This information disclosure is submitted after the mailing date of a notice of [ ] 5. allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- This information disclosure statement is submitted with the statement required for []6. items 2, 3, 4 or 5 above [1.97(c), (d), (e)]:
- , hereby state the following: I,
  - Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
  - No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement.
- This information disclosure statement is submitted with the fee of \$180 set forth [] 7. in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item 6 statement is provided).
- Please charge this fee and any other fees associated with this application to Deposit []8. Account No. 50-1059.

Respectfully submitted,

Reg. No. 46,401

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Complete if Known Substitute for form 1449A/PTO Application Number INFORMATION DISCLOSURE February 27, 2004 Filing Date STATEMENT BY APPLICANT WILLS et al. First Named Inventor Art Unit n/a (use as many sheets as necessary) n/a **Examiner Name** 20712-0061 Sheet of | 3 Attorney Docket Number

			U.S. PATENT	DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevar
Initials *	No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear
	A	US-6,579,067 B1	06-17-2003	Holden	
	В	US- 6,459,606 B1	10-01-2002	Jadric	
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Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Initials*	No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T <sup>6</sup>
	U	DE 1004 7629	04-11- 2002	Linde AG		
	٧	EP 1 055 885 A2	11-29- 2000	Sharp Kabushiki Kaisha		
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	Z	JP 60102878	06-07- 1985	Nihon Denki Seiki KK		
	AA	GB 1579045	11-12- 1980	Electric Power Res Inst.		

Examiner Signature	Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the

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5	Substitute for form 1449A/PTO				Complete if Known			
					Application Number		-	
INFORMATION DISCLOSURE				· ·	Filing Date	February 27, 2004		
	STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	WILLS et al.		
					Group Art Unit	n/a		
		(use as man	y sheets a	s necessary)	Examiner Name	n/a		
	Sheet	2	of	3	Attorney Docket Number	20712-0061		

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2		
-	AB	MURPHY, J.M.D., "Thyristor Control of A.C. Motors", Principles of Variable-Frequency A.C. Drives, October 10, 1975, pgs 3-4, 111-114, & 120-121, Pergamon Press, New York			
<u>.</u>					
1					

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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	Substitute for form 1449A/PTO					Complete if Known	
					Application Number		
	INFO	RMATION	DIS	CLOSURE	Filing Date	February 27, 2004	
	STATEMENT BY APPLICANT				First Named Inventor	WILLS et al.	
	•				Art Unit	n/a	
		(use as many she	ets as	necessary)	Examiner Name	n/a	
abla	Sheet	3	of	3	Attorney Docket Number	20712-0061	

		Document Number	Publication Date	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevan
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		FOREIGN PA	TENT DOCU	MENTS		
Examiner Cite Initials* No.1		Foreign Patent Document	S. Nicolian	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> ( <i>if known</i> )	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T <sup>6</sup>	
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Examiner Signature	Date Considered	

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